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Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in th

Listing of Claims:

1. (**Currently Amended**) A computer-implemented method for adjusting the col
an image, each pixel having one or more color values, the method comprising:

identifying a target region of pixels in the image that represent an object, the object
having a shape and a predefined set of features; ~~and~~

defining one or more spatial profile functions based at least in part on one or more
spatial properties of one or more of the predefined set of features;

calculating a first probability that one or more pixels in the target region represent
a first one of the predefined features based at least in part on a color of the one or more
pixels;

calculating a second probability that the one or more pixels represent a second one
of the predefined features based at least in part on a color of the one or more pixels;

combining the first probability and the second probability to calculate a probability
that the one or more pixels represent the first feature or the second feature; and

computing a **new** color of **the** one or more pixels in the target region **based at least in**
part on the probability that the one or more pixels represent the first feature or the second
feature ~~from one or more probability functions~~ and **the** one or more spatial profile functions**.**~~,~~
~~each probability function defining a probability value at each of the one or more pixels in~~
~~the target region, the probability value representing the probability that the pixel~~
~~corresponds to one or more features of the object, each spatial profile function being~~
~~defined based on one or more spatial properties of the object or one or more of its features.~~

2. (**Original**) The method of claim 1, wherein the spatial properties include size.

3. (**Original**) The method of claim 1, wherein the spatial properties include shape.

4. (**Currently Amended**) The method of claim 1, wherein the spatial profile function**s include** [[**is**]] a sigmoid function.

5. (**Currently Amended**) The method of claim 1, wherein the spatial profile function**s include** [[**is**]] a Gaussian function.

6. (**Currently Amended**) The method of claim 1, wherein the spatial profile function**s include a spatial profile function** [[**is**]] defined by a mask.

7. (**Original**) The method of claim 1, wherein identifying a target region of pixels includes:
        receiving data that identifies the target region of pixels.

8. (**Currently Amended**) The method of claim 1, wherein **the first feature comprises skin and the second feature comprises sclera.** [[:]]
        ~~at least one of the probability values represents the probability that the pixel corresponds to either a first feature or a second feature.~~

9. (**Currently Amended**) The method of claim 1, wherein **the first feature comprises skin and the second feature comprises highlight.** [[:]]
        ~~the color computation changes as the probability value increases.~~

10. (**Currently Amended**) The method of claim 1, wherein **the one or more spatial profile functions comprise a spatial profile function defined based at least in part on one or more spatial properties of a ciliary margin.** [[:]]
        ~~the color computation changes as the probability value decreases.~~

11. (**Canceled**)

12. (**Original**) The method of claim 1, wherein:
        the image is a photographic image including an eye exhibiting a redeye effect; and
        the identified region of pixels corresponds to a portion of the eye that exhibits the redeye effect.

13. (**Currently Amended**) The method of claim 1, wherein:

the **predefined set of** feature**s include at least** [[is]] one of skin, sclera, **iris, highlight, an edge,** or redeye.

14. (**Currently Amended**) The method of claim 1, wherein computing the **new** color includes:

computing the **new** color to match a representative color for the region; and

using the probability **that the one or more pixels represent the first feature or the second feature** ~~values~~ to change the computation.

15. (**Original**) The method of claim 14, wherein the representative color represents an iris color for the eye.

16. (**Currently Amended**) The method of claim 1, wherein computing the **new** color includes:

desaturating the color of pixels in a subregion of the region; and

using the probability **that the one or more pixels represent the first feature or the second feature** ~~values~~ to modulate the amount of desaturation.

17. (**Original**) The method of claim 16, wherein:

the subregion is the center of the region.

18. (**Original**) The method of claim 16, wherein:

the subregion is an outer rim of the region.

19. (**Currently Amended**) The method of claim 1, wherein computing the **new** color includes:

~~defining a region of pixels in the image that corresponds to the pupil of the eye, each pixel having a luminance value; and~~

reducing **a** [[the]] luminance value of one or more ~~of the~~ pixels **that correspond to the pupil of an eye.** ~~in the region.~~

20. (**Currently Amended**) The method of claim 1, wherein computing the **new** color includes:

computing the color of a pixel based **in part** on [[the]] color values of pixels surrounding the pixel.

21. (**Currently Amended**) The method of claim 20, wherein computing the **new** color of a pixel based **in part** on [[the]] color values of pixels surrounding the pixel includes:

defining a window of pixels surrounding the pixel; **and**

determining a representative color for the window of pixels**.**; and

~~computing the color value of the pixel to match the representative color for the window.~~

22-25. (**Canceled**)

26. (**Currently Amended**) A ~~computer-program product, tangibly embodied in a~~ computer readable medium **encoded with a computer program**[[,]] for adjusting the color of pixels in an image, the computer program ~~product~~ comprising instructions operable to cause data processing equipment to perform operations comprising:

identifying a target region of pixels in the image that represent an object, the object having a shape and a predefined set of features; ~~and~~

defining one or more spatial profile functions based at least in part on one or more spatial properties of one or more the predefined set of features;

calculating a first probability that one or more pixels in the target region represent a first one of the predefined features based at least in part on a color of the one or more pixels;

calculating a second probability that the one or more pixels represent a second one of the predefined features based at least in part on a color of the one or more pixels;

combining the first probability and the second probability to calculate a probability that the one or more pixels represent the first feature or the second feature; and

computing a **new** color of **the** one or more pixels in the target region **based at least in part on the probability that the one or more pixels represent the first feature or the second feature** ~~from one or more probability functions~~ and **the** one or more spatial profile functions**.**~~, each probability function defining a probability value at each of the one or more pixels in the target region, the probability value representing the probability that the pixel corresponds to one or more features of the object, each spatial profile function being defined based on one or more spatial properties of the object or one or more of its features.~~

27. (**Currently Amended**) The **computer readable medium** ~~product~~ of claim 26, wherein the spatial properties include size.

28. (**Currently Amended**) The **computer readable medium** ~~product~~ of claim 26, wherein the spatial properties include shape.

29. (**Currently Amended**) The **computer readable medium** ~~product~~ of claim 26, wherein the spatial profile function**s include** [[is]] a sigmoid function.

30. (**Currently Amended**) The **computer readable medium** ~~product~~ of claim 26, wherein the spatial profile function**s include** [[is]] a Gaussian function.

31. (**Currently Amended**) The **computer readable medium** ~~product~~ of claim 26, wherein the spatial profile function**s include a spatial profile function** [[is]] defined by a mask.

32. (**Currently Amended**) The **computer readable medium** ~~product~~ of claim 26, wherein identifying a target region of pixels includes:

receiving data that identifies the target region of pixels.

33. (**Currently Amended**) The **computer readable medium** ~~product~~ of claim 26, wherein **the first feature comprises skin and the second feature comprises sclera.** [[:]]

~~at least one of the probability values represents the probability that the pixel corresponds to either a first feature or a second feature.~~

34. (**Currently Amended**) The **computer readable medium** ~~product~~ of claim 26, wherein **the first feature comprises skin and the second feature comprises highlight.** [[:]]

~~the color computation changes as the probability value increases.~~

35. (**Currently Amended**) The **computer readable medium** ~~product~~ of claim 26, wherein **the one or more spatial profile functions comprise a spatial profile function defined based at least in part on one or more spatial properties of a ciliary margin.** [[:]]

~~the color computation changes as the probability value decreases.~~

36. (**Canceled**)

37. (**Currently Amended**) The **computer readable medium** ~~product~~ of claim 26, wherein:

the image is a photographic image **including** ~~to include~~ an eye **that exhibits** ~~to exhibit~~ a redeye effect; and

the identified region of pixels corresponds to a portion of the eye that exhibits the redeye effect.

38. (**Currently Amended**) The **computer readable medium** ~~product~~ of claim 26, wherein:

the **predefined set of** feature**s include at least** [[is]] one of skin, sclera, **iris, highlight, an edge,** or redeye.

39. (**Currently Amended**) The **computer readable medium** ~~product~~ of claim 26, wherein computing the **new** color includes:

computing the **new** color to match a representative color for the region; and

using the probability **that the one or more pixels represent the first feature or the second feature** ~~values~~ to change the computation.

40. (**Currently Amended**) The **computer readable medium** ~~product~~ of claim 39, wherein the representative color represents an iris color for the eye.

41. (**Currently Amended**) The **computer readable medium** ~~product~~ of claim 26, wherein computing the **new** color includes:

desaturating the color of pixels in a subregion of the region; and

using the probability **that the one or more pixels represent the first feature or the second feature** ~~values~~ to modulate the amount of desaturation.

42. (**Currently Amended**) The **computer readable medium** ~~product~~ of claim 41, wherein:

the subregion is the center of the region.

43. (**Currently Amended**) The **computer readable medium** ~~product~~ of claim 41, wherein:

the subregion is an outer rim of the region.

44. (**Currently Amended**) The **computer readable medium** ~~product~~ of claim 26, wherein computing the **new** color includes:

~~defining a region of pixels in the image that corresponds to the pupil of the eye, each pixel to have a luminance value; and~~

reducing **a** [[the]] luminance value of one or more of the pixels **that corresponds to the pupil of the eye** ~~in the region~~.

45. (**Currently Amended**) The **computer readable medium** ~~product~~ of claim 26, wherein computing the **new** color includes:

computing the color of a pixel based **in part** on the color values of pixels **surrounding** ~~to surround~~ the pixel.

46. (**Currently Amended**) The **computer readable medium** ~~product~~ of claim 45, wherein computing the **new** color of a pixel based **in part** on the color values of pixels to surround the pixels includes:

defining a window of pixels to surround the pixel;**and**

determining a representative color for the window of pixels**.** ~~; and~~

~~computing the color value of the pixel to match the representative color for the window.~~

47-50. (**Canceled**)

51. (**Currently Amended**) The method of claim 1 wherein computing the **new** color includes computing the color based **in part** on an original color of the one or more pixels ~~and a new color value of the one or more pixels~~.

52. (**Currently Amended**) The **computer readable medium** ~~product~~ of claim 26, wherein computing the **new** color includes computing the color based **in part** on an original color of the one or more pixels ~~and a new color value of the one or more pixels~~.